

IN THE CLAIMS:

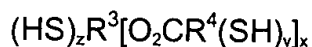
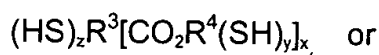
1-3 (Cancelled)

4. (Currently Amended) A polymer composition comprising:

a chlorine-containing or bromine-containing polymer; and

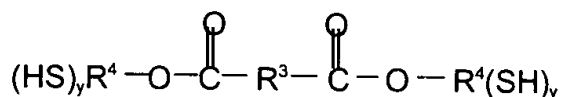
a heat stabilizer component consisting of a) an organic thiol compound

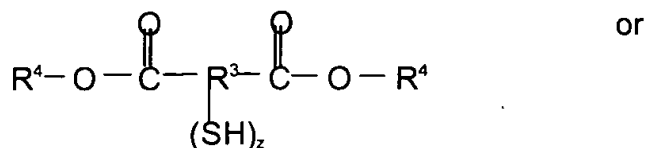
having the formula:



wherein R^3 ~~and each R^4~~ , ~~independently, comprises~~ is a straight chain or branched ~~aliphatic~~ alkenyl having from 1 to about 20 carbon atoms, wherein each R^4 , independently, is a straight chain or branched alkyl having from 1 to 20 carbon atoms, and wherein, independently, y is either 0 or an integer up to about 10, z is either 0 or an integer up to about 10, and x is ~~either 1 or 2, an integer up to about 10~~ wherein y or z is at least one, said organic thiol compound being present in an amount from about 1 to about 100 parts by weight per 100 parts by weight of said polymer, ~~and said composition being substantially free of a metal based stabilizer and optionally b) epoxidized soybean oil.~~

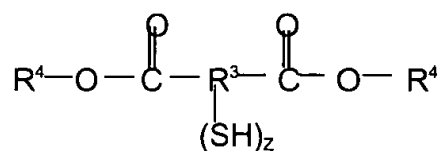
5. (Currently Amended) A polymer composition according to claim 4, wherein said organic thiol compound has the formula:





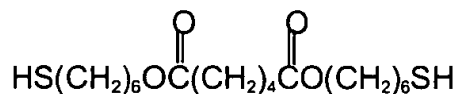
wherein each ~~R³ and R⁴, independently, can be~~ is a straight chain or branched ~~aliphatic-alkenyl~~ having from 1 to about 10 carbon atoms, wherein R⁴ is a straight chain or branched alkyl having from 1 to about 10 carbon atoms, and y and z, independently, are an integer from 1 to about 10.

6. (Currently Amended) A polymer composition according to claim 5, wherein said organic thiol compound is:

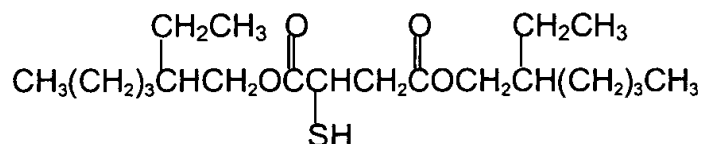


wherein each ~~R³ and R⁴, independently, can be~~ 2-ethylhexyl, methyl, methylene, ethyl, ethylidene, propyl, propylidene, butyl, butylidene, hexyl, hexylidene, decyl, or decylidene is methylene, ethylidene, propylidene, butylidene, hexylidene, or decylidene, and each R⁴, independently, is 2-ethylhexyl, methyl, ethyl, propyl, butyl, hexyl or decyl, and wherein z is 1.

7. (Original) A polymer composition according to claim 5, wherein said organic thiol compound is:



8. (Original) A polymer composition according to claim 6, wherein said organic thiol compound is:



9. (Original) A polymer composition according to claim 4, wherein said polymer is poly(vinyl chloride), poly(vinylidene chloride), poly(vinyl bromide), poly(vinylidene bromide), chlorinated poly(vinyl chloride), chlorinated polyethylene, chlorinated natural or synthetic rubber, polychloroprene, rubber hydrochloride, chlorinated polystyrene, or copolymers thereof, or combinations thereof.

10-11 (Cancelled)

12. (Original) A composition according to claim 5, wherein the amount of said organic thiol is from 1 to about 50 parts by weight per 100 parts by weight of said polymer.

13. (Original) A composition according to claim 5, wherein the amount of said organic thiol is from about 50 to about 100 parts by weight per 100 parts by weight of said polymer.

14. (Currently Amended) A composition according to claim 4, wherein said composition ~~further comprises a~~ includes said ~~non-heavy metal containing HCl~~

~~seavenger~~ epoxidized soybean oil in an amount from about 1 to about 30 parts by weight per 100 parts by weight of said polymer.

15. (Cancelled)

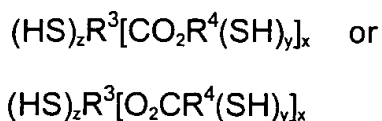
16. (Currently Amended) A composition according to claim 5, wherein said composition ~~further comprises a~~ includes the ~~non-metallic HCl scavenger~~ said epoxidized soybean oil in an amount from about 1 to about 30 parts by weight per 100 parts by weight of said polymer.

17-22 (Cancelled)

23. (New) A composition according to claim 9, wherein the amount of said organic thiol is from 1 to about 50 parts by weight per 100 parts by weight of said polymer.

24. (New) A composition according to claim 9, wherein the amount of said organic thiol is from about 50 to about 100 parts by weight per 100 parts by weight of said polymer.

25. (New) A polymer composition, comprising:
a chlorine-containing or bromine-containing polymer; and
a heat stabilizer component comprising an organic thiol compound
having the formula:

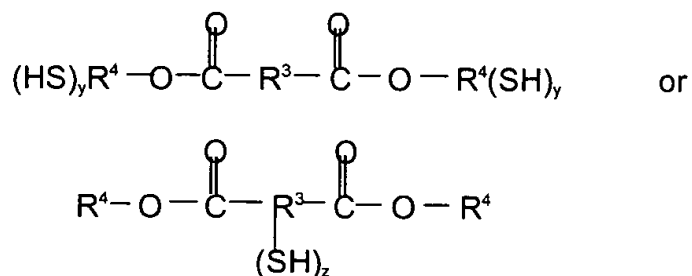


wherein R^3 is a straight chain or branched alkenyl having from 1 to about 20 carbon atoms, wherein each R^4 , independently, is a straight chain or branched alkyl having from 1 to 20 carbon atoms and wherein, independently, y is either 0 or an integer up to about 10, z is either 0 or an integer up to about 10, wherein y or z is at least one, and x is 2, with the proviso that when said organic thiol is said:



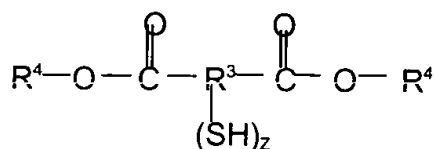
R^3 is ethylidene and z is 1, R^4 is an alkyl having from 6 to about 20 carbon atoms, and when y is 1, R^4 has 4 to about 20 carbon atoms, said organic thiol compound being present in an amount from about 1 to about 100 parts by weight per 100 parts by weight of said polymer, and said composition being free of a Lewis acid and a metal-containing stabilizer.

26. (New) A polymer composition according to claim 25, wherein said organic thiol compound has the formula:



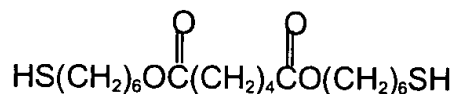
wherein R³ is a straight chain or branched alkenyl having from 1 to about 10 carbon atoms, wherein R⁴ is a straight chain or branched alkyl having from 1 to about 10 carbon atoms, and y and z, independently, are an integer from 1 to about 10, with the proviso that when R³ is ethylidene and z is 1, R⁴ is an alkyl having from 6 to about 10 carbon atoms, and when y is 1, R⁴ has 4 to about 10 carbon atoms.

27. (New) A polymer composition according to claim 26, wherein said organic thiol compound is:

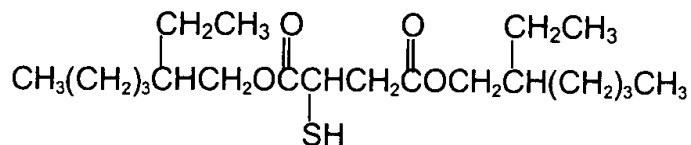


wherein R³ is methylene, propylidene, butylidene, hexylidene, or decylidene, and each R⁴ independently is 2-ethylhexyl, methyl, ethyl, propyl, butyl, hexyl or decyl, and wherein z is 1.

28. (New) A polymer composition according to claim 26, wherein said organic thiol compound is:



29. (New) A polymer composition according to claim 27, wherein said organic thiol compound is:



30. (New) A polymer composition according to claim 25, wherein said polymer is poly(vinyl chloride), poly(vinylidene chloride), poly(vinyl bromide), poly(vinylidene bromide), chlorinated poly(vinyl chloride), chlorinated polyethylene, chlorinated natural or synthetic rubber, polychloroprene, rubber hydrochloride, chlorinated polystyrene, or copolymers thereof, or combinations thereof.

31. (New) A composition according to claim 26, wherein the amount of said organic thiol is from 1 to about 50 parts by weight per 100 parts by weight of said polymer.

32. (New) A composition according to claim 26, wherein the amount of said organic thiol is from about 50 to about 100 parts by weight per 100 parts by weight of said polymer.

33. (New) A composition according to claim 30, wherein said composition includes epoxidized soybean oil in an amount from about 1 to about 30 parts by weight per 100 parts by weight of said polymer.

34. (New) A composition according to claim 27, wherein said composition includes epoxidized soybean oil in an amount from about 1 to about 30 parts by weight per 100 parts by weight of said polymer.

35. (New) A composition according to claim 30, wherein the amount of said organic thiol is from 1 to about 50 parts by weight per 100 parts by weight of said polymer.

36. (New) A composition according to claim 30, wherein the amount of said organic thiol is from about 50 to about 100 parts by weight per 100 parts by weight of said polymer.